CHAPTER 3
DISASTER PREPAREDNESS

3-1. Policy. Refer to Chapter 3, ER 500-1-1.

3-2. The Emergency Manager. The Emergency Manager serves as principal advisor to the Commander on all matters related to natural and technological disasters and national security emergencies, civil disturbances, and terrorism activities. During emergencies, the Emergency Manager provides overall management of emergency/disaster operations and planning activities, typically is the official who directly represents the commander for disaster related matters.

a. Subject Matter Expertise. The Emergency Manager is the subject matter expert on PL 84-99 and the Stafford Act, and is well versed about authorized projects, Continuing Authorities Programs, other USACE emergency authorities, and the Support for Others Program, and how those authorities interface with PL 84-99 and Stafford Act activities. The Emergency Manager is knowledgeable of the functions of all elements within the command. The Emergency Manager is also knowledgeable of other agencies' emergency management authorities, particularly those of the Natural Resources Conservation Service and the Federal Highways Administration.

b. Command Preparedness Activities. The Emergency Manager is responsible for all Command Preparedness activities. This includes the conduct of emergency planning, training, and exercises; the implementation of a viable corrective actions program; and maintenance of the organization's EOC staff and facility in a high state of preparedness. The Emergency Manager is directly responsible for the execution of operational response and recovery missions.

c. Rehabilitation and Inspection Program. The Emergency Manager oversees the Rehabilitation and Inspection Program. This incorporates the Flood Control Works Database, Initial Eligibility Inspections and Continuing Eligibility Inspections, and Rehabilitation Assistance when necessary, and includes all Federal and non-Federal flood control works.

d. Support to Other Corps Elements. The Emergency Manager is responsible for managing the organization's CEM Program support to other Corps elements. This includes ensuring that functional (support) personnel are trained and positions are staffed, staffing Planning and Response Teams, and assisting personnel deploying in support of other Corps elements. The Emergency Manager is responsible for overwatching all administrative functions associated with the organization's personnel while deployed.

3-3. Operation Plans (OPLAN's).

a. Definition. An Operation Plan (OPLAN) is a proposal for executing a command decision or project. It represents the command's preparation for future or anticipated operations.

b. Requirements. Requirements for OPLAN's are contained in ER 500-1-1, paragraph 3-3.b.

c. OPLAN Format. The format at Figure 3-1 will be the basic format used for preparation of Emergency Management OPLAN's in USACE. Additional guidance regarding format and content may be found in Field Manual (FM) 101-5, Appendix H. FM 101-5 may be accessed through the General Dennis J. Reimer Training and Doctrine Digital Library at http://www.adtdl.army.mil/atdls.htm.

_____
(Classification)

Copy _____ of _____ copies
Issuing Headquarters
Place of Issue
Date-time group of signature

OPERATION PLAN _____ (common or code name)
(number)

References:

Time Zone Used Throughout the Plan:

Task Organization*: (State the allocation of units/resources, to include augmentation teams and major liaison elements.)*

1. SITUATION
   a. Supporting agencies
      (1) DOD
      (2) FEMA
      (3) Federal (non-DOD)
      (4) State/tribal/Local
   b. Assumptions *(List all assumptions, e.g., percentage availability of district personnel after the disaster strikes, availability of communications means, EOC activation level, etc.)*

2. MISSION

3. EXECUTION
   Commander's Intent: *(State the commander's intent, previously derived during the planning process.)*
   a. Concept of Operations. *(The concept describes the major efforts done to execute the plan, and major supporting efforts necessary to support the operating elements.)*

Figure 3-1. OPLAN Format

b. Specified tasks. *List, in separate subparagraphs, specific tasks to be executed by subordinate elements. This could include activities such as closing locks to recreational boat traffic, staffing a water control center on a 24-hour basis, installing stoplog closures at a certain river stage, moving construction equipment from a project location to a staging area, or uploading sandbags on a vehicle.)*

c. Coordinating Instructions.

(1) Time or condition when the plan becomes effective *(May be upon issuance of the commander's Declaration of Emergency.)*

(2) Commander's Critical Information Requirements

(3) Risk reduction/safety *(List only those measures unique to the plan and not included in unit SOP's.)*

(4) Environmental considerations *(If extensive, refer to the environmental annex.)*

(5) Others as required

4. SERVICE SUPPORT

a. Support concept. *(State the concept of logistical support.)*

b. Contracting, materiel, and services.

c. Medical evacuation and hospitalization.

d. Personnel. *(Individual or team augmentation request system.)*

5. COMMAND AND SIGNAL

a. Command. *(State the primary and at least one alternate location for the Emergency Operations Center and for principal subordinate elements such as Resident Offices.)*

b. Signal. *(List specific communications instructions not covered by SOP. Identify required reports, to include format and report submission times.)*

ACKNOWLEDGE:

NAME (Commander's last name)
RANK (Commander's rank)

OFFICIAL:
Name and position
ANNEXES:

_____
(Classification)

Figure 3-1. OPLAN Format (Continued)

3-4. Exercises.

a. Frequency. MSC's and districts are required to conduct an exercise at least once every two years. See ER 500-1-1, paragraph 3-6.a. regarding waivers of exercise requirements.

b. After Action Reports. After action reports for exercises conducted will follow the format specified in Figure 4-13.

c. Office of Primary Responsibility. The Readiness Support Center has primary USACE responsibility for designing and supporting exercises. This includes contract support.

3-5. Emergency Operations Centers (EOC's) and Facility Support.

a. Dedicated EOC's. Headquarters USACE, MSC's, districts, the 249th Engineer Battalion (Prime Power), and the Topographic Engineering Center (TEC) will provide a dedicated facility for an EOC to provide command and control for emergency operations. This paragraph sets minimum requirements for an EOC and is applicable to all MSC's, Districts, the 249th Engineer Battalion (Prime Power), and the Topographic Engineering Center. Other laboratories and FOA's may establish EOC's commensurate with their emergency responsibilities. Funding will be provided by budgeted FCCE appropriations. (Note: Additional requirements for operability during national emergencies or exercises should also be incorporated into plans, and funded under other programs as appropriate.)

b. Minimum Requirements for the EOC.

(1) Power. Uninterrupted power is critical to 24-hour operations. The EOC will have an emergency backup generator and an uninterrupted power source (UPS) system. Generators will have a sufficient supply of fuel to operate for at least seven days without restocking.

(2) Auxiliary Heating Ventilation/Air Conditioning (HVAC). HVAC will be provided for the EOC in order to ensure operability during weekends and/or after duty hours, and shall be capable of being powered by the emergency backup generator. For buildings where the entire HVAC system must be on to heat/cool the EOC, the controls in the EOC will allow for system activation, or arrangements must be made to have the system activated during these times. Independent systems may be provided if economical and feasible.

(3) Communications Connectivity. Data communications from the point of origin in the EOC to its final destination (i.e., HQUSACE, MSC, Districts, Labs, and CEAP-A Processing Centers, worldwide access gateways such as Internet, FEMA, and various DOD locations)

will be provided. Space must be allocated for communications and information processing equipment. Critical components located outside the EOC that are necessary to maintain communication (e.g., radio, LAN/WAN, telephone), and electronic mail servers will meet emergency power and HVAC requirements. E-mail and other software capabilities may be provided to the EOC using a file server either within the EOC, or elsewhere within the facility headquarters.

(4) Furniture. Furniture suitable and conducive to an EOC in the quantity necessary to meet the staffing level specified by emergency plans will be provided. Modular or customized furniture is permitted for enhancement of operations. Specialized design for command and control systems furniture modules is permitted.

(5) Dual Use Space. Spaces designated as dual use will be designed, configured, and prewired to serve the operational mode of the EOC. Dual use of facility and equipment for meetings, classrooms, or computer training centers may be practical; however, the ultimate control and coordination of the space shall be retained by the Emergency Manager. For USACE elements located in high risk areas, where the EOC is activated frequently, the dual use strategy is not appropriate. Because the EOC must be available for activation at any time, noncompatible use such as storage is not permitted.

(6) Location. EOC's should be located in the most appropriate portion of the building to minimize the risk of threats while enhancing operations. Items to consider include flood/storm surge, access during power outages when elevators are unavailable, and physical security.

(7) Access. The EOC will be configured to eliminate nonessential pedestrian traffic. Consideration should be given to limiting the number of entrances (consistent with life safety codes), and providing for a reception area that is screened from the main part of the EOC. All EOC areas, including those areas that consist of dual use space, shall have adequate physical security measures.

(8) Storage of Classified Information. For USACE elements with military and national security responsibilities, EOC's must be capable of operating as a restricted area. EOC's will have approved containers for storage of classified material in the EOC, or in an area that is continuously accessible from the EOC.

c. EOC Facility Design. EOC's will include all the physical elements necessary to support the systems and staff in performing the tasks and activities required by USACE missions and emergency operations functions. EOC's will vary in size and configuration based on threat levels and activities supported. Functions common to all EOC's include Crisis Management Team and Crisis Action Team operations, administrative tasks,

planning, crisis communication and information handling, briefing and display, status tracking, and emergency reporting.

(1) Staff Work Area. Full time staff must have dedicated space for non-crisis daily activities. Many of these activities must continue during emergencies. Staff work area requirements are calculated by providing a minimum of 125 sq. ft. for each staff position. Individual work areas must provide a minimum of 64 sq. ft. when modular furniture is used, or 90 sq. ft. when standard office furniture is used. Emergency Managers should be provided closed door privacy, with a minimum of 150 sq. ft. The staff areas must be located in or adjacent to the EOC operations area.

(2) EOC Operations Room. All MSC's and Districts shall provide a dedicated operations room to coordinate major events and events that happen with little or no warning. The layout and configuration of the operations room may support dual use of the facility during noncrisis period unless it is anticipated that the EOC will be activated 50 percent or more of the year. Operations rooms should accommodate at least 10 members of the crisis action team (CAT), dependent on local requirements. The minimum size of the operations room shall allow 64 sq.ft. per CAT member, and a minimum of 200 sq. ft. for display and common equipment. Wall display areas or track-mounted modular display systems, projection screens, white boards, television monitors, large format multi-scan monitors, and similar equipment can be provided to meet operational requirements.

(3) Communications Room. A communications room shall be provided adjacent to the operations room to house radio transmitters/radio control modules. Optimally, the communications room will be separated from the operations room by a glass partition. The communications room will be a minimum of 100 sq.ft., and ideally at least 150 sq. ft. It must contain sufficient space to accommodate all required radio/communications equipment and communications support equipment. The communications room must have proper ventilation, meet equipment cooling requirements, and allow for sufficient operator space.

(4) Briefing Room. The briefing room should be a highly capable multimedia/audio visual center that can display information from various sources (e.g., television, computer, 35 mm slide projector, videocassette recorder). The briefing room will be a minimum of 200 sq. ft., with 15 to 20 sq.ft. provided for each additional person above eight being briefed. The briefing room will consist of an audience area, a control area, podium, and display screens and devices. An additional equipment room/area is required, containing a minimum of 40 sq.ft. for rack mounted electronic equipment and similar items. The control area will contain a console to support computers, video recorders, the master system controller, and related equipment.

(5) Storage Area. Secure storage space is required for EOC equipment and supplies, EMHV items, life support supplies, publications, deployment kits, and similar items. These materials can be stored in the EOC or in a nearby secured area accessible by Emergency Management staff. The size of the storage area is dependent upon the amount of materials and equipment that must be readily accessible during emergencies.

(6) Other Equipment. EOC design and layout shall also provide adequate space for administrative and clerical support, copy machines, supplies, file units, GIS systems, and bookcases.

d. Briefing and Display. Emergency operations briefing and display systems will include all equipment necessary to display needed information. Briefing and display systems will be configured to provide timely graphics, imagery and data displays to enhance the decision making process. A centralized audiovisual control system allowing placement of information on large screen displays or monitors throughout the EOC is authorized. The size and complexity of the briefing and display systems will vary according to the threat in the element's area of responsibility. EOC's that are typically activated 50% of the time shall have dual screen electronic briefing capability. Other EOC's will have either single or dual screen system depending on local requirements. Functional areas to be considered in designing a briefing and display system include: switching and distribution, audio support, external audio/video/data interfaces, audio visual peripheral devices, display systems, briefings presentation systems, and briefing control.

(1) Security Requirements. Briefing and Display Systems shall be designed and accredited to handle classified information if applicable to mission requirements.

(2) Presentation Software. Divisions and districts should develop standardized templates for use during emergencies. Formatted displays for briefings are an important component in expediting display of decision support information in a time sensitive environment. ENGLink formats should be used to the maximum extent possible.

e. Communications. The EOC communications systems shall include all the equipment necessary for voice, data, and facsimile necessary to support emergency operations. Basic communications systems may include telephone service (voice/data/ facsimile), network service (LAN/WAN), HF radio communications, tactical radio communications, and satellite communications.

(1) Telephone Communications. The voice, data, and facsimile service constitute the primary means of communications for EOC's during both normal and emergency operations. Each EOC shall have telephone conferencing and classified capability. Each EOC shall maintain at least two Secure Telephone Unit (STU) instruments, unless HQUSACE grants an exception. Each EOC shall also maintain at least two facsimile

machines, one dedicated to incoming calls and one dedicated to outgoing calls. An additional facsimile accredited for use with a STU is required for classified communications. For smaller offices, the secure facsimile machine may substitute for the outgoing facsimile machine.

(2) Network Services. Network Services consist of LAN and WAN access. Connectivity to the WAN from the LAN should be provided on the EOC segment to guarantee connectivity to the WAN during emergencies.

f. Life Support Capabilities. In an emergency situation there may be occasions when critical life support supplies and equipment are not available. It is therefore necessary for all EOC's to have these items on hand to provide for sustained operations of at least 72 hours duration for EOC and support staff element. Many life support items are perishable and should be inspected and replaced as needed. Required items may vary by MSC/district depending on the threat, and may include:

(1) Lighting. Battery operated and/or chemical light sources.

(2) Water. In areas where the water supply may be vulnerable, EOC's should stock a minimum of one gallon per person per day. Additional water is also needed for sanitation, cleaning, and cooking.

(3) Rations. Military Meals, Ready-To-Eat (MRE's) are available through the General Services Administration (GSA). Also available from commercial sources are freeze-dried foods and similar items. Two meals a day per person should be the minimum amount stored.

(4) Medical Assistance. First aid kits will be available throughout the EOC. Several members of the EOC staff should be trained in First Aid/CPR.

(5) Life Saving Kit. Following a disaster, EOC facilities may be damaged, and members of the staff may be required to assess damage to the structure, turn off utility systems, or gain emergency access or egress. A basic kit should contain a battery powered AM/FM broadcast radio, hard hats, gloves, eye guards, dust masks, flashlights with batteries, safety vest, grease markers, light sticks, shovel, ax, wrecking bar, pick mattock, hammer, rake, hacksaw, adjustable wrenches, and screwdrivers.

(6) Personnel Support Items. A variety of personnel support items may be required in or near the EOC to sustain staff during extended periods in the EOC. Required functions may include cooking/dining, refrigeration, cleaning, and sleeping arrangements, as well as personal hygiene and sanitation. Items may include cots and bedding, refrigerator, microwave oven, sink, shower, coffee maker, and a food preparation counter.

g. Alternate EOC's. Each MSC and district will have the capability to establish command and control to sustain operations if their primary EOC is unavailable. SOP's shall be developed for activation of an alternate facility under an all hazard concept. MSC's and districts will establish procedures for deployment of personnel and equipment to the alternate EOC during duty and non-duty hours. Alternate EOC's will have the same functional capabilities as the primary EOC. Equipment may be austere, but at a minimum will include computer hardware/software, telephones, radio communications, fax machine, printers, and the current contracting package sufficient to establish Command and Control. This paragraph does not supersede other existing requirements for alternate headquarters under other plans. The Alternate EOC concept may be accomplished by:

(1) The fly away kit concept, i.e., planning that includes development of SOP's and checklists that pre-identify commercial/military facilities such as barracks, motel/hotels, equipment, and predesignated staff; or,

(2) Use of a designated preselected and pre-stocked alternate EOC(s); or,

(3) Relocation to another USACE element that has an operating EOC. This option may require partnering agreements that are renewed periodically.

3-6. The Deployable Tactical Operations System (DTOS). DTOS is a command and control concept that employs four tiers of capability.

a. Tiers of Capability.

(1) Tier 1 - Fly Away Kits (FAK's). Each district has been provided with a fly away kit (FAK) that enables a small group of personnel to communicate and maintain records on a laptop computer.

(2) Tier 2 - Rapid Response Vehicles. HQUSACE has procured six Rapid Response Vehicles (RRV's). These vehicles provide work space, communications, and life support capability for six to eight personnel. For planning purposes, RRV's have an operational range of 18 hours of driving time from home station.

(3) Tier 3 - Deployable Tactical Operations Centers. HQUSACE has procured three Deployable Tactical Operations Centers (DTOC's). These systems provide work space, communications, and life support capability for approximately 40 personnel. For planning purposes, DTOC's have an operational range of 36 hours driving time from home station.

(4) Tier 4 - Containerized Tactical Operations Centers. HQUSACE has procured two Containerized Tactical Operations Centers (CTOC's). These systems functionally are similar to the DTOC for office support equipment, communications equipment, and computers. However, the CTOC components are containerized for rapid air movement, and are intended for use in insular and remote areas.

b. Control of DTOS Assets.

(1) Tier 1. FAK's are under the operational control of district engineers.

(2) Tier 2. RRV's are under the operational control of HQUSACE, and may be deployed only as directed by HQUSACE. Divisions or districts requiring RRV support will submit requests through channels to the USACE Operations Center.

(3) Tier 3. DTOC's are under the operational control of HQUSACE, and may be deployed only as directed by HQUSACE. Divisions or districts requiring DTOC support will submit requests through channels to the USACE Operations Center.

(4) Tier 4. CTOC's are under the operational control of HQUSACE, and may be deployed only as directed by HQUSACE. Divisions or districts requiring CTOC support will submit requests through channels to the USACE Operations Center.

c. Planning. When appropriate to do so, divisions and districts should incorporate the use of DTOS (to include FAK's) into disaster preparedness plans. The planning assumption should be made that the appropriate configuration would be available, based on standard stationing of available assets.

d. Funding for DTOC/CTOC/RRV Deployment. The requesting division/district is responsible for providing the custodial district of the DTOC/CTOC/RRV with funds for deploying the requested asset. The requesting division/district will use FCCE funds (Class 210, 230, 510, or 520 only) or FEMA funds, based on the mission requirements, to fund DTOC/CTOC/RRV deployments and maintenance needs in support of PL 84-99 and Stafford Act missions and activities. Normal FAK operations and maintenance are funded by Class 110. Contact the Tactical Support Center if replacement of a FAK component is needed.

e. DTOS Use in Exercises and Displays. All DTOS assets are available for employment during exercises, in consonance with exercise objectives, available funding, level of commitment of DTOS assets, etc. Displays of DTOS assets at other than Emergency Management-related functions must be funded by the requesting office.

3-7. Emergency Management High Visibility Items.

a. Description. Emergency Management High Visibility (EMHV) items are items that are used to easily identify USACE personnel and equipment at disaster locations. For personnel, EMHV items are typically shirts, jackets, vests, and hats that are worn by the individual. Banners and magnetic signs are normally used to identify USACE owned or contracted equipment. Refer to http://www.nap.usace.army.mil/emo/shirts.htm for additional information.

b. Stockage Level. Divisions/districts will maintain a stock of EMHV items commensurate with the size of the division/district, the staffing requirements for Planning and Response Teams (and comparable elements), and the potential number of deploying personnel when supporting a victim division/district.

c. EMHV Items for Individual Filler Personnel Supporting a Victim District. For a minimum of two weeks after the declaration or onset of a disaster operation, the home division/district Emergency Manager will provide deploying organizational personnel with sufficient quantities of EMHV items. Later deploying personnel will be provided EMHV items for as long as the supporting division/district has supplies available. This is to preclude an unnecessary logistics burden on the victim district.